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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/622,023

07/16/2003

Jon C. Sandberg

90-02

1681

23713

7590

01/05/2007

GREENLEE WINNER AND SULLIVAN P C

4875 PEARL EAST CIRCLE

SUITE 200

BOULDER, CO 80301

EXAMINER

NGUYEN, DUNG T

ART UNIT

PAPER NUMBER

2828

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

01/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/622,023

Applicant(s)

SANDBERG ET AL.

Examiner

Dung (Michael) T. Nguyen

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1, 5, 9, 17, and 19 are objected to because of the following informalities: please correct the “a” and “said” properly in the claims. Appropriate correction is required.

Claim 19 is objected to because of the following informalities: it is not clear that the limitations of “adjusting the intensity of the laser monitor signal so that fluctuations in the desired signal and the laser monitor signal are equal, forming a corrected signal; subtracting the corrected signal from the desired signal” and “ automatically adjusting the intensity of the laser monitor signal so fluctuations in the desired signal and the laser monitor signal are equal, forming a corrected signal; subtracting the corrected signal from the desired signal” are repeated by mistake. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16, and 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Dohmeier et al. (5491682).

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With respect to claims 1-16 and 19-22, Dohmeier et al. show in Fig.4 a laser scattering system having reduced noise comprising:

a multi-line (multi-wavelength) laser cavity 150 (laser diode with multi-wavelength) (as evidence by Ban et al (4843031) in Abstract) having output along a laser beam axis;

an output coupler coupled to one end of the laser cavity along the laser beam axis (Note that it is inherent that a laser cavity must have an output coupler in order to output the laser beam);

a compensating optic (152) (col.11, 1.63-65 disclose different well-known configurations of optical components for directing a radiation beam, meaning the compensating optic may be used) (Note that the compensating optic is also a focus optic and a Rayleigh optic as described in the instant application on page 5, line 19 and hence a Rayleigh correction can be applied by using a Rayleigh optic) in optical communication with the output coupler;

an output detector (monitor signal) 156 in optical communication with the compensating optic;

a gain adjusting element 166 in electrical communication with the output detector;

a scattered light detector 158 (desired/scattered signal) at a selected angle away from the laser beam axis;

a differencing junction 162 in electrical communication with the gain adjusting element and in electrical communication with the scattered light detector (col.3, 1.39-63, col.11, 1.59-67, and col.12, 1.1-67).

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Allowable Subject Matter

Claims 17-18 are allowed.

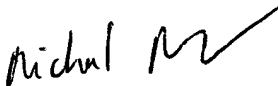
The following is an examiner's statement of reasons for allowance: Dohmeier et al. fail to disclose the limitation of "comparing a desired laser output setpoint to the intensity of the laser monitor signal".

Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.



Michael Dung Nguyen

12/22/06